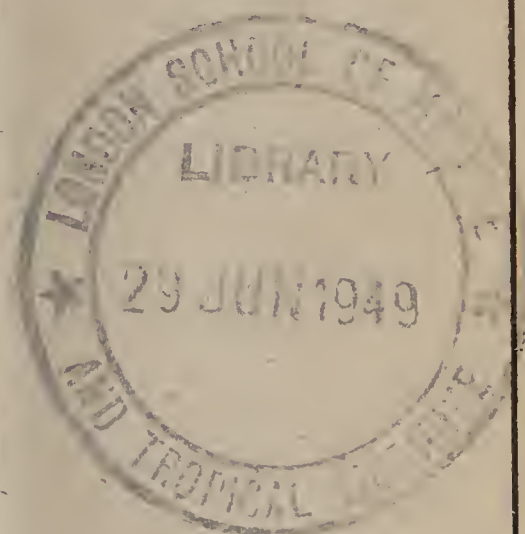




COLONY OF SIERRA LEONE

ANNUAL REPORT
of the Medical and Health
Services for the Year
1947

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FREETOWN :

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1949

Annual Report of the Medical and Health Services, 1947

I—ADMINISTRATION

The position regarding senior staff, which had shown a steady deterioration over the past few years, is now serious and indicates that a further decline in the position is to be expected. Seventeen medical officers have left the Colony in the past three years and only eight replacements have arrived so that the position is now very much worse than it was at the end of 1944.

2. This unfortunate state of affairs has necessitated the closure of several hospitals and dispensaries, and considerable areas of the territory have been left without medical services for long periods. The hospital at Kabala has now been closed for over two years and both Pujehun and Port Loko have only been open at irregular intervals. For six months the yaws and sleeping sickness campaign had only one medical officer to direct and undertake the work over a large area of country, made difficult by lack of communications which necessitated much walking: during the latter half of the year two medical officers were available for this work, which, however, cannot be carried out efficiently with less than three.

3. The Medical Entomologist left Sierra Leone on secondment and was replaced by a Malarial Entomologist who took charge of the Malaria Control Unit in the Freetown area. Two Senior Medical officers retired and the Senior Medical Officer-in-charge, Yaws and Sleeping Sickness Campaign, was transferred to Nigeria; only one of these posts had been filled at the end of the year under review. One Senior Medical Officer (Health) retired on pension and the vacancy so caused was filled by promotion within the Colony. One medical officer retired on pension and another was transferred to Nigeria. To offset these losses three medical officers (Colonial Medical Service) and three medical officers on agreement assumed duty. This increase, however, by no means brought the establishment to a sufficient strength to permit opening all hospitals, despite the fact that three temporary medical officers were employed during the greater part of the year. A second Dental Surgeon was appointed.

4. An Administrative Secretary, Laboratory Superintendent and seven Nursing Sisters assumed duty, while two Nursing Sisters were transferred to another Colony, and one of the two Radiographers resigned. Two Sanitary Superintendents on agreement arrived only in time to prevent a breakdown, owing to lack of supervision, in the Malaria Control of Freetown.

5. Although a certain amount of improvement in the staff position with regard to medical officers had taken place the establishment was still considerably below full strength and the incidence of leave, among officers long overdue, minimised any apparent benefit. Moreover, the fact that the new medical officers had had no post-graduate training in tropical medicine and required experience in administrative work somewhat limited the scope of their employment on arrival.

6. Friendly relations continued with the Military authorities and, in the absence of a Service dental surgeon all dental work was undertaken by this department. Hospital treatment of wives and children of Services personnel was also undertaken by the Medical Department.

7. Finance:—

*Personal Emoluments	...	...	...	...	...	£87,650
Other Charges	...	...	...	...	...	94,550
						£182,200

* Actual £105,809, due to revision of salaries.

8. In addition the following sums were expended under the Colonial Development and Welfare Act:—

Sleeping Sickness and Yaws Campaign (Scheme D. 416)	...	£11,495†
Malaria Control (Scheme D. 322)		18,058
Bo Hospital Extension and Equipment (D. 274 and D. 274A)	...	2,812
Connaught Hospital Extension (D. 861)		5,212
		£37,577

DEVELOPMENT

9. The rising cost of Medical and Health Services due to higher rates of pay and increased cost of supplies has made it impossible to contemplate proceeding with the programme of development and expansion of these services as originally planned, and a revised scheme which involved considerable reductions has had to be prepared. This programme however follows the main lines of the original scheme which provided for increases in the establishment of most of the existing hospitals, the construction of four new hospitals, and a large extension of health centres throughout the Protectorate. These health centres are a most important feature of the programme as by means of them, it will be possible to bring medical assistance within reach of a much larger proportion of the population. A large expansion of maternity and welfare services for mothers and children will be possible in connection with these centres, and an important function will be the dissemination of health propaganda and education. A leprosy survey and the establishment of a leper settlement are also provided for, and it is hoped to start this work in 1948. The existing sleeping sickness and yaws survey and treatment organisation will be extended to the rest of the country as an endemic diseases unit.

10. It is difficult however to envisage an adequate increase in effective social medical services unless development of resources in the country is such as to ensure a much higher standard of living and education than exists at present.

11. The immediate attack must be directed to removing by treatment and, wherever possible, by prevention of those diseases and physical disabilities which prevent or interfere with the productivity of the individual.

LEGISLATION

12. The following Ordinances and Rules were enacted during the year:—

1. The Lunacy Regulation Ordinance, 1924 (Cap. 115), Amending Ordinance:—

An Ordinance to Amend the Lunacy Regulation Ordinance, 1924, No. 9 of 1947.

Orders in Council made thereunder:—

The Lunacy (Appointment of Asylum) Order, 1947—Public Notice No. 101 of 1947.

2. The Undesirable Advertisements Ordinance, 1945—No. 20 of 1945. Amending Ordinance:—

An Ordinance to Amend the Undesirable Advertisements Ordinance, 1945—No. 10 of 1947.

3. The Building Lines Regulation Ordinance, 1939—No. 15 of 1939. Order in Council made thereunder:—

The Building Lines Regulation Order in Council, 1947—Public Notice No. 188 of 1947.

† Includes £6,225 from Colony Resources.

4. The Dangerous Drugs Ordinance, 1926—No. 10 of 1926.

Order in Council made thereunder :—

The Dangerous Drugs Order in Council, 1947—Public Notice No. 194 of 1947.

5. The Dog Ordinance, 1924 (Cap. 54) :—

Proclamation—Public Notice No. 205 of 1947.

6. The Public Health Ordinance, 1924—Cap. 171.

Order in Council made thereunder :—

The Kissy Market Order in Council, 1947—Public Notice No. 239 of 1947.

7. The Public Health (Protectorate) Ordinance, 1926—No. 26 of 1926.

Order in Council made thereunder :—

The Protectorate Health Areas (Amendment) Order in Council, 1947—Public Notice No. 263 of 1947.

VITAL STATISTICS

13. Registration of births and deaths is only compulsory within the Colony area, and as a census has not been taken since 1931 any statistics derived from the figures shown would be fallacious owing to the abnormal movement of the population during the war. Moreover, as the majority of deaths are registered without medical certificates accurate classification of causes of death is not possible.

14. At present, registration in the Protectorate is optional, and, from a statistical point of view, worthless. This was introduced solely for the purpose of accustoming the inhabitants to the procedure, and it is intended to apply legislation in the near future making registration compulsory in the Protectorate.

BIRTHS AND DEATHS—FREETOWN AND COLONY

BIRTHS

<i>District</i>	1945			1946			1947		
	<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>
Freetown ...	1,180	1,113	2,293	1,087	1,132	2,219	1,127	1,138	2,265
Rest of the Colony ...	757	715	1,472	911	869	1,780	1,046	880	1,926

DEATHS

<i>District</i>	1945			1946			1947		
	<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>	<i>M.</i>	<i>F.</i>	<i>Total</i>
Freetown ...	944	687	1,631	1,067	832	1,899	875	635	1,510
Rest of the Colony ...	779	601	1,380	875	654	1,529	865	654	1,519

15. Births and Deaths registered in the Protectorate were :—

	<i>Births</i>	<i>Deaths</i>
Male ...	1,537	1,201
Female ...	1,567	989

16. *Infant Mortality*:—Out of 2,265 births in Freetown, 413 deaths under one year were registered giving an infant mortality rate of 182. The figures for the past five years are :—

1943	1944	1945	1946	1947
167	153	160	208	182

17. Fifty-five per cent of the deaths in Freetown of infants under one year occurred during the first month of life. A high proportion of these deaths is due to the low standard of living in a large part of the population, leading to malnutrition of the mothers.

PUBLIC HEALTH

18. The Public Health in so far as there have been no very serious outbreaks of epidemic disease, has been reasonably satisfactory. When account is taken of the vast amount of disabling endemic disease of a more or less chronic nature which affects the working capacity of the individual sufferer however, it must be considered far from satisfactory.

19. It is hoped that the programme to provide fifty health centres in the Protectorate in the next ten years will go some way towards providing treatment facilities within more reasonable reach of the population. When this programme is completed no individual should be much more than ten miles from some form of medical assistance.

20. The health centres will provide dispensary facilities and also the services of trained midwives and Health Visitors, an important part of whose duties will be the education of the population in personal and social hygiene.

21. The general sanitary position throughout the country has been maintained at its somewhat primitive level. Further septic tank latrines have been introduced into some of the larger centres of population in the Protectorate and have proved a success. Refuse disposal by controlled tipping is the method adopted in most parts of the country, and appears eminently suited to the conditions pertaining to Sierra Leone.

22. Investigations into the best means of increasing and improving the water supply to Freetown and its environs have been completed, and the consulting engineer's report on the scheme is now awaited.

ENDEMIC DISEASES

23. It must be remembered that the figures for disease given in this report largely represent persons who have sought treatment of their own volition at Hospitals or Dispensaries and they cannot be considered as representing the full incidence of disease. While it is true that a large number of people attend for comparatively trivial complaints, it must be equally true that many cases of a more severe nature never come to notice. It is obvious nevertheless that certain diseases stand out as being of major importance, and many of these are preventible. Malaria and yaws are two examples which give a high morbidity rate. Malaria has a high but unknown mortality in the early years of life; yaws does not have a high mortality at any period of life but is the cause of much chronic disability which seriously affects the sufferer's capacity for work.

24. The African is particularly susceptible to respiratory disease, so that bronchitis and pneumonia are common. The prognosis of these diseases is however much more hopeful now that penicillin and drugs of the Sulphonamide group are available.

25. While the true incidence of Tuberculosis is not known it is obviously a disease which constitutes a problem of some magnitude. Extensive hospitalization is out of the question and it is proposed to provide only a small sanatorium in the vicinity of Freetown together with special isolation pavilions at selected hospitals in the Protectorate.

26. *Malaria*.—13,125 cases of malaria with fourteen deaths were treated at Government hospitals during 1947. The corresponding figures for 1946 were 13,066 cases with 26 deaths.

27. A further lowering of the incidence of malaria in the Freetown area has been achieved as the result of the work of the Malaria Control Unit, which is financially assisted with funds provided under the Colonial Development and Welfare Act.

28. The following summary briefly outlines the work done by the Unit during 1947.

29. *Control Measures.*—In general the same methods were used as in 1946, although trials of new methods and materials have been made where possible.

(a) *DDT Mass Spraying*:—

An extended trial of DDT in kerosene solution as a residual insecticide was made. Every house in the controlled area was sprayed, with an application of 100 milligram DDT per square foot, but the measure cannot be regarded as a success.

The following objections were evident:—

- (i) The cost was much higher than DDT emulsions.
- (ii) No appreciable reduction in room density indices could be demonstrated.
- (iii) Reduction of breeding could not be shown in the one area, Levuma, where anti-larval work was suspended after the DDT Mass spraying.

(b) *Pyrethrum Spraying*:—

Pyrethrum in kerosene solution as mass spray for the killing of adults was continued in areas where control house catches showed that foci of breeding had escaped the anti-larval control.

(c) *Trials of new methods against adult mosquitoes*:—

- (i) *DDT Water Dispersible Powder.*—A preparation of DDT which can be used for residual spraying of mud walls and other non-painted surfaces, avoiding the expense of kerosene, was tried at Levuma, and proved easy to apply, and very effective in reducing the day-time mosquito population of the houses. The same objections raised against DDT kerosene solution however apply to this and the next mentioned product.
- (ii) *DDT Emulsion T.P. 543.*—A 17 per cent Xylene solution of DDT with emulsifiers to give any required dilution with water. Used in a dilution of 1 in 4 at Sawkta Village near Lungi airfield this product gave dramatic reduction in the room density indices. As it does not break in any dilution this product is not likely to be useful as a larvicide.
- (iii) *Gammexane Water Dispersible Powder.*—Unlike the DDT water dispersible powder, P. 735 caused trouble with the pumps used, as the powder was too coarsely ground to give permanent suspension.

(d) *DDT Emulsion.*—The use of DDT Emulsion as a larvicide has been continued. Due to the rise in the price of the materials, its cost was higher than in previous years, but so far no larvicide to supersede it has been found.

(e) *Trials of new Larvicides*:—

- (i) *Malariol High Spread.*—This is a 5 per cent solution of DDT in an oil which gives a very thin film on the surface of water. The spread is almost instantaneous, and a complete kill of anophelines in 24 hours has been registered. Culicines appear to be able to survive, at least in small numbers. The cost of the oil is high, but it would appear that the saving of labour and apparatus due to the fact that it can be applied by a comparatively unskilled person with an oil can or dropping bottle, may make it a competitor with DDT emulsion. The swamp at Levuma was satisfactorily controlled by the use of Malariol High Spread from August to November, but it was then found that on waters of abnormally low pH value, which are not uncommon in the district, the spread of the oil is inhibited. Such waters were found at Levuma, Wellington and elsewhere, and their presence must limit the use of this material.

- (ii) *Gammexane Emulsion*.—Using the I.C.I. Gammexane concentrate D. 929, emulsions were prepared on the same lines as the DDT emulsion. Used in the same way as the latter, dosages of 0.5 oz. and 0.25 oz. Gammexane per acre were applied. A complete kill of anopheline larvæ in 24 hours and paralysis in three hours were obtained with the higher strength. Only small scale trials in the Wellington bunded area have so far been carried out, but a more extended trial will be arranged.

30. *Permanent Works*—

(a) *The Aberdeen bund*.—This has been raised and cored with relatively impermeable local clay, and an attempt has been made to protect its surface from erosion by planting grass. The bund is now acting satisfactorily as shown by control house figures.

(b) *Wellington bund*.—This bund has been repaired and a new gate fitted. Breeding of culicines takes place in the drains, borrow-pits and ground cracks. Anophelines and culicines breed in the Agriculture Department's rice plots, and in sweet potato beds bordering the reclaimed area on the landward side. All this breeding is controllable by larvicidal measures if necessary. *Anopheles gambiae* is now the anopheline produced, instead of *A. melas* which was the original reason for the construction of the bund.

31. The following table shows the monthly room mosquito density indices for Freetown for the years 1943–1947:—

<i>Month</i>	1943	1944	1945	1946	1947
January ...	0.24	0.20	0.01	0.02	0.02
February ...	0.22	0.23	0.01	0.02	0.01
March ...	0.63	0.26	0.00	0.03	0.00
April ...	0.30	0.04	0.01	0.02	0.00
May ...	0.43	0.03	0.06	0.14	0.01
June ...	0.46	0.26	0.33	0.68	0.12
July ...	0.28	0.45	0.11	0.19	0.14
August ...	0.17	0.19	0.04	0.02	0.01
September ...	0.22	0.05	0.2	0.00	0.00
October ...	0.16	0.01	0.00	0.00	0.00
November ...	0.05	0.00	0.00	0.00	0.00
December ...	0.02	0.01	0.01	0.00	0.00

32. The percentage of school children with positive blood films for the years 1944–47 is shown below:—

<i>Area</i>	1944	1945	1946	1947
Urban ...	21.3 per cent	15.7 per cent	11.1 per cent	7.6 per cent
Suburban ...	42.7 „	18.1 „	17.2 „	14.4 „
Rural ...	47.4 „	37.6 „	20.0 „	27.5 „

33. In the returns of blood examinations made at the Connaught Hospital Plasmodium Malariae was detected on five occasions, representing 0.4 per cent and 1.1 per cent of the positive findings in patients in the Connaught Hospital and at the Infant Welfare Clinic respectively. Of the five cases two were from outside the control area, one had no associated address, and the remaining two came from different houses in Freetown. This reappearance may have been due to a cyclical change such as was recorded by Gordon and Davey in 1930, and if so *P. malariae* may be expected to reappear among the school children in the near future.

34. In conclusion, the year 1947 has shown some improvement on the two previous years, both as regards mosquito catches and the incidence of malaria. The peak of anopheline production was delayed a month as compared with 1946, and was not so high. It was still evident, however, that for a short period at the beginning of the rains, breeding had got out of control in the suburban areas of Cline Town and Brookfields. Restoration of the position was obtained by better supervision and organization. If this increased efficiency could be attained before the appearance of adult mosquitoes in the control houses it might be possible to cut down the seasonal peak still further. It depends on supervision by European Sanitary Superintendents, whose numbers, due to leave and sickness, have never been adequate at the crucial period.

35. *Trypanosomiasis and Yaws*.—1,812 cases of trypanosomiasis and 21,276 cases of yaws were treated by the Yaws and Sleeping Sickness Unit financed under the Colonial Development and Welfare Act, while 50 cases of the former disease and 13,220 of the latter obtained treatment at Government hospitals. 14,477 cases of yaws were treated at Government dispensaries throughout the territory.

36. The work of the Yaws and Sleeping Sickness Unit was seriously handicapped throughout the year by the shortage of medical officers. For the first half of the year only one medical officer was available for duty with the unit, and in the latter half of 1947 two medical officers with no experience in this type of work were all the staff available for this highly specialised organisation. Needless to say the campaign had to run on a more or less maintenance basis only, in an attempt to prevent a regression of a position which had been so hardly gained.

37. Four new treatment centres were opened during the year and three established centres were closed as the number of cases in the neighbourhood had been so reduced as not to justify their continuance. A small number of mobile and temporary treatment centres were organised to deal with areas far removed from permanent centres. At the end of the year five dispensaries and seven treatment centres were operating under the control of this unit.

38. Full scale census and diagnosis teams worked in chiefdoms contiguous to the Liberian border. This was considered necessary as a sampling survey had indicated an increase in sleeping sickness in this area, which had been thoroughly surveyed some time before. As a result of the investigation it would appear that the increase is not due to a higher incidence in the population in Sierra Leone, but to the fact that there is a comparatively large movement of population in both directions across the frontier.

39. *Smallpox*.—As a result of mass vaccination the number of cases of smallpox was less than in 1946. Sporadic cases and small localised outbreaks continued to occur, and 465 cases with 82 deaths were reported compared with 750 and 114 in the previous year. Two imported cases were notified in Freetown, but at no time was the port declared to be infected.

40. Vaccination undertaken in conjunction with the authorities in neighbouring territories continued, and this campaign accounted for 81,483 vaccinations out of a total of 251,576. The teams of vaccinators in the frontier areas worked in scantily populated areas and in difficult terrain.

41. *Tuberculosis*.—294 cases of all forms of tuberculosis with 48 deaths were treated at Government hospitals. These statistics, however, by no means portray the true incidence of the disease.

42. It would appear that the Creole population of Freetown has, in the course of time, acquired a resistance to the disease approximating to that observed in the urban populations of Europe and, in consequence, a more sanguine outlook regarding treatment is justified.

43. The tuberculosis pavilion erected at Bo Hospital was completed during the year and is now occupied.

44. *Plague*.—No cases occurred during the year. 4,540 rats were examined for *P. pestis* with negative results. 448 fleas of the species *Xenopsylla cheopis* and 805 *Xenopsylla braziliensis* were identified from the live rats caught.

45. *Typhus (Murine)*.—Four cases of murine typhus were treated in hospital. All cases occurred in Freetown.

46. *Rabies*.—One fatal case of hydrophobia received treatment in hospital. During 1947, 3,152 dogs were impounded in Freetown and of this number, 3,129 were destroyed. Twenty-three dog brains and one cat brain were examined histologically and Negri bodies were present in eleven.

47. *Venereal Diseases*.—Gonorrhœa accounted for 77 per cent of all cases of venereal diseases treated at hospitals; 3,833 cases were seen while only 586 cases of syphilis received treatment. Other venereal diseases, mainly cases of climatic bubo, amounted to 541 cases.

48. *Dysentery*.—814 cases of all types of dysentery were treated, of which 254 and 61 were classified as amoebic and bacillary dysentery respectively.

49. *Typhoid Fever*.—Eighty-four cases of typhoid fever were treated.

MATERNITY AND CHILD WELFARE

50. Midwifery cases are dealt with at all hospitals, and the total number of admissions was 1,712 with 1,122 deliveries. Of this number 1,432 were admitted to the maternity hospital, Freetown, where 920 women were delivered and 949 infants were born, including 29 twin births. 825 of the children were discharged alive and 255 of the deliveries were abnormal.

51. Training of midwives was undertaken at the maternity hospital, Freetown, where sixteen students entered for the examination; ten were successful entitling them to admission to the local register for midwives. The mission hospitals at Segbwema and Rotifunk have undertaken the training of a lower grade of midwife for employment as domiciliary midwives attached to health centres in the Protectorate.

52. Ante-natal and infant welfare clinics were run in association with all general hospitals. The largest attendances, as would be expected, were at the maternity hospital, Freetown. The infant welfare clinic, however, has not proved a complete success owing to the fact that association with a hospital has tended to attract sick children to the detriment of the true function of the clinic. It is proposed, however, to build three health centres in Freetown where infant welfare clinics will be held in future and where prevention will be stressed.

53. The following table compares the work done at the Maternity Hospital and the associated clinics during the years 1945, 1946 and 1947:—

ANTE-NATAL CLINIC

	1945	1946	1947
New Cases	2,812	2,532	2,863
Subsequent Attendances	10,343	10,882	6,577
Home Visits	2,569	3,170	3,701

POST-NATAL CLINIC

New Cases	914	804	721
Subsequent Attendances	720	725	583

INFANT WELFARE CLINIC

New Cases	3,429	2,369	3,196
Subsequent Attendances	14,439	15,548	9,987
Home Visits	14,747	16,626	17,471

SCHOOL HYGIENE

54. The school medical service continued during 1947 on more or less a maintenance basis, as owing to staff shortage the school medical officer had to take charge of the ante-natal and infant welfare clinics associated with the Maternity Hospital. This work occupied the greater part of the medical officer's time to the detriment of the school service and, in consequence, regular routine examination of the school population could not be undertaken.

55. Despite increased work associated with the clinics, the medical officer visited as many schools as possible in the Freetown area to assess the general condition of the pupils; and the school nurse paid routine visits to schools, school clinics and undertook vaccination of new pupils.

56. The school clinic at St. Joseph's Convent, Freetown, continued to do excellent work. Visits by the medical officer had revealed a moderately high incidence of skin diseases in the pupils and special afternoon sessions to diagnose and treat these ailments were organised at the clinic.

57. In May of the year under review a clinic was started at the Government Model School, Freetown. This was supervised by the school nurse and helped to relieve congestion at the St. Joseph's clinic.

58. Simple drugs and dressings were issued to certain Protectorate and Colony schools situated at some distance from hospitals or dispensaries. Although not an ideal measure this is appreciated and appears to do some good.

59. Minor degrees of avitaminosis continue to be fairly prevalent in the school population. The conditions seen are mainly the result of lack of the B group of vitamins, although cases of vitamin C deficiency are also observed. The foodstuffs which can prevent the onset of these conditions are available locally and are commonly used, but owing to the prevalent methods of cooking the vitamin contents reduced in amount or destroyed. The shortage of staff prevented a survey of the incidence of avitaminosis and, as a result, no comparison with the previous year can be given.

60. The following table shows briefly the work undertaken by the school medical service:—

Total number of routine examinations	...	...	...	15,395
Number of new cases treated at St. Joseph's clinic	...	...	...	16,592
Total attendances at St. Joseph's clinic	...	...	...	33,597
Total number of cases referred to Connaught Hospital	...	...	...	138
Number of children vaccinated by the school nurse	...	...	...	335

LABOUR CONDITIONS

61. Unemployment, particularly of unskilled labour, was apparent in Freetown, and in some cases malnutrition has been obvious. Despite this, cases of nutritional diseases attending hospital show a decrease compared with 1946 when 3,119 cases with 35 deaths were recorded: during the year under review 2,104 cases with seventeen deaths were treated at Government hospitals.

HOUSING AND TOWN PLANNING

62. No progress worthy of note was made during 1947. Housing for Government officials and the general public was difficult in Freetown and all the larger centres in the Protectorate.

63. The programme for erecting houses for the labour force employed by the Sierra Leone Development Company has been hampered by the fact that certain necessary building materials could not be obtained.

PORT HEALTH WORK

64. The sanitation and health work of the port of Freetown is undertaken by the Senior Medical Officer of Health. Pratique was granted to 589 vessels, and advice given regarding anti-malarial precautions. No case of quarantineable disease occurred.

65. 3,758 vaccinations against smallpox were performed on deck passengers crew and port employees.

66. Owing to a subsidence in the runway at Waterloo airport during the year, it was decided to re-open the airfield at Lungi which lies across the estuary from Freetown. This involved reorganisation at very short notice of the sanitation and health measures required under the International Convention. Intensive mosquito control in the area was undertaken, general sanitation was improved and the existing pipe borne water supply safeguarded from pollution. Population residing within a five-mile radius of the airport was vaccinated against smallpox.

67. Conditions at the airport are, however, far from satisfactory. There is no perimeter fence and it is impossible to control unauthorised persons from entering the confines. Communications are bad and, in the event of an accident, the nearest medical officers are either at Port Loko which is 40 miles distant by road, or in Freetown which can only be reached by road and launch. Up to the present it has only been possible to station a dispensary attendant, at the airport to deal with any simple emergencies which may occur; it is hoped, however, to post a trained dispenser for this duty in the near future.

HOSPITALS AND DISPENSARIES

68. There is a steadily increasing demand for hospital accommodation and all hospitals are filled to the maximum and in some cases seriously overcrowded.

69. In the Connaught Hospital in Freetown the accommodation in the surgical wards is largely occupied by emergencies. Less urgent surgical conditions have to be placed on a waiting list. A comparable though less acute situation obtains in medical wards and many patients who should be admitted have to be treated as out-patients. The temporary extension of 50 beds at Murray Town has helped, but the need for more beds is urgent.

70. A start has been made, with funds made available under the Colonial Development and Welfare Act, to extend the Connaught Hospital. Part of this programme is to convert the present Nursing Sisters' quarters at the Hospital to a block for accommodation of better class patients. Bungalows for the Nursing Sisters are in the course of construction and, when occupied, conversion of the existing quarters will be put in hand. The new wing will be of the nature of a nursing home and should be ready for occupation in 1948.

71. Two of the three hospitals in the Protectorate which were closed during 1946 were reopened, and all dispensaries in the Protectorate were fully staffed. Unless more qualified medical staff is recruited soon, however, closure of hospitals will again be necessary.

72. The new tuberculosis pavilion and the annexe for senior officers at Bo Hospital were completed and put in use during the year.

73. The statistical returns for 1947 for general hospitals and dispensaries are summarized below together with the figures for 1945 and 1946:—

1.—*Colony*

(a) CONNAUGHT HOSPITAL

	1945	1946	1947
In patients	3,212	3,345	3,141
Out-patients (exclusive of Europeans):			
New cases	36,326	35,360	38,686
Subsequent attendances	114,870	120,421	107,376

(b) HILL STATION HOSPITAL

In-patients	431	334	400
Out-patients:			
New cases	382	519	418
Subsequent attendances	918	1,051	757

(c) COLONY DISPENSARIES

New cases	33,998	38,886	47,967
Subsequent attendances	122,375	105,692	124,655

2.—*Protectorate*

(a) BO HOSPITAL

In-patients	908	1,269	1,160
Out-patients:			
New cases	8,689	11,019	12,451
Subsequent attendances	65,674	38,671	54,819

(b) OTHER HOSPITALS

In-patients	2,976	2,229	2,095
Out-patients:			
New cases	57,245	66,955	52,032
Subsequent attendances	145,732	175,581	178,070

(c) DISPENSARIES

New cases	81,555	91,962	93,107
Subsequent attendances	189,308	209,159	172,177

KISSY MENTAL HOSPITAL

74. During 1947 the name of the institution was changed from Asylum to Mental Hospital in accordance with modern practice.

75. The hospital was extended by erecting a complete female wing consisting of two wards together with sanitary annexes, the whole capable of housing 30 patients. This extension permitted the use of the existing female section for male patients and allowed a further sub-division of male patients according to behaviour.

76. Despite the increase in accommodation the hospital was overcrowded throughout the year, and on 31st December, 1947, the excess of population over actual accommodation was 42, or 38 per cent.

77. Thrity-three patients or 50 per cent of the admissions were discharged. This figure is very satisfactory considering the number of cases admitted in a chronic or demented condition. The death rate is high, but again a large proportion of patients arrive at the hospital in a very toxic state and often showing signs of serious malnutrition.

78. The following table briefly shows the statistics over the past three years:—

	1945	1946	1947
Admissions	52	78	66
Discharges	11	53	33
Deaths	18	16	17
Number of inmates on 31st December,			
19	127	136	152

PRISON

79. The state of overcrowding in the Freetown Prison during 1947 was a matter of serious concern. The prison, designed to accommodate 250 inmates, had an average daily population of slightly over 620. As the Freetown Prison is the only institution in the territory for the incarceration of long sentence prisoners, the introduction of infectious or contagious diseases in its present overcrowded state might be disastrous.

80. Two hundred and eighty-five prisoners were treated in the prison hospital with five deaths; and 7,055 cases of minor ailments occurring in prisoners and staff were treated at the prison out-patients department. 5,866 new admissions and 474 prisoners who were to undergo punishment were medically examined.

DENTAL CLINIC

81. A second Dental Surgeon was appointed and assumed duty during the year.

82. The dental service for school children was organised and its reception by the public was far in excess of what had been expected. It was found that some 50 per cent of all school children examined required some form of dental attention, and of this number 68 per cent reported for treatment. As a result of this service it is hoped that in future there will be a fall in the abnormally large number of extractions included in the statistics relating to dental work.

83. The employment of two Dental Surgeons has allowed more frequent visits to the larger towns and centres in the Protectorate during the year.

84. The following table briefly indicates the amount of work done in the past three years:—

<i>Date</i>	<i>Patients</i>	<i>Fillings</i>	<i>Extractions</i>	<i>Other Treatment, Scalings, etc.</i>	<i>Local Anæsthetics</i>	<i>General Anæsthetics</i>
1945	4,002	534	5,519	75	3,219	2 fractures
1946	4,294	630	5,971	255	3,622	4 fractures
1947	7,221	1,296	7,583	1,005	5,892	4 fractures

PATHOLOGICAL LABORATORY

85. The number of specimens examined has gradually increased from 15,727 in 1941 when the laboratory was reorganised to 33,672 in 1947. In addition to the examinations summarized in the appendix, 146 autopsies were performed and 688 inoculations against yellow fever were given.

F. MACLAGAN,
for Director of Medical Services.

MEDICAL DEPARTMENT,
FREETOWN,
21st September, 1948.

SUMMARY OF THE WORK UNDERTAKEN AT THE PATHOLOGICAL LABORATORY

<i>Examinations</i>						<i>Positive Results</i>	<i>Total Examin- ations</i>
(1) BLOOD FILMS	...	...	...	...	...		10,319
Plasmodium falciparum	...	...	...	...	...	1,134	
with gametocytes	...	...	...	...	...	1	
Plasmodium malariae	...	...	...	...	...	5	
Trypanosomes	...	...	...	...	...	1	
Films, maternal, placental and infants blood at birth							784
Plasmodium falciparum, maternal	...	...	...	...	...	2	
" placental	...	...	...	...	...	4	
(2) GLAND PUNCTURES	...	...	...	...	...		13
(3) FAECES. Microscopical Examinations	...	...	...	...	...		3,052
<i>Ova.</i> Tænia saginata	...	...	...	...	...	22	
Ascaris lumbricoides	...	...	...	...	...	454	
Ankylostomes	...	...	...	...	...	416	
Oxyuris vermicularis	...	...	...	...	...	1	
Trichuris trichiuria	...	...	...	...	...	163	
Schistosoma mansoni	...	...	...	...	...	1	
<i>Larvæ.</i> Strongyloides stercoralis	...	...	...	...	...	84	
<i>Cysts.</i> Entamœba histolytica	...	...	...	...	...	14	
Entamœba coli	...	...	...	...	...	29	
Iodamœba butschlii	...	...	...	...	...	4	
Giardia Lamblia	...	...	...	...	...	1	
<i>Amœbæ.</i> Entamœba histolytica	...	...	...	...	...	16	
Entamœba coli	...	...	...	...	...	3	
<i>Evidence of dysentery.—</i>							
Blood, pus, epithelial cells, etc.	...	...	...	...	...	482	
Undigested starch	...	...	...	...	...	46	
Occult blood	...	...	...	...	...	15	
Charcot-leyden crystals	...	...	...	...	...	1	
Chilomastix	...	...	...	...	...	1	
Blastocystis hominis	...	...	...	...	...	1	
(4) URINES. Chemical and microscopical	...	...	...	...	...		3,294
Albumen (more than trace)	...	...	...	...	...	851	
Sugar	...	...	...	...	...	83	
Bile	...	...	...	...	...	18	
Acetone	...	...	...	...	...	15	
Pus	...	...	...	...	...	778	
Blood	...	...	...	...	...	399	
Casts	...	...	...	...	...	81	
Schistosoma hæmatobium, ova	...	...	...	...	...	27	
Trichomonas	...	...	...	...	...	74	
Spermatozoa	...	...	...	...	...	28	
Crystals. Sulphonamides	...	...	...	...	...	46	
Tyrosine	...	...	...	...	...	1	
(5) SPUTUM. Microscopical examination	...	...	...	...	...		1,111
Mycobacterium tuberculosis	...	...	...	...	...	181	
Blood	...	...	...	...	...	4	

SUMMARY OF THE WORK UNDERTAKEN AT THE PATHOLOGICAL LABORATORY—*continued*

<i>Examinations</i>	<i>Positive Results</i>	<i>Total Examin- ations</i>
(6) VENEREAL DISEASES.		
Urethral and prostatic smears		789
Neisseria gonorrhœa	218	
Vaginal and cervical smears		117
Neisseria gonorrhœa	10	
Trichomonis vaginalis	2	
Dark background examinations		58
Treponema pallidum	7	
(7) SEROLOGICAL EXAMINATIONS.		
Agglutination		286
Bact. typhosum H.	54	
Bact. typhosum O.	14	
Proteus X. 19	15	
Proteus X. 2	3	
Kahn reactions		4,158
Strongly positive	804	
Positive	857	
Weak positive and doubtful	541	
Ide reactions		49
Positive	14	
(8) CEREBRO-SPINAL FLUIDS.		
General examination		59
Cells increased. Leucocytes	10	
" Lymphocytes	12	
Protein increased	8	
Globulin increased (Pandy)	8	
Chlorides decreased	1	
Sugar decreased... ..	1	
Kahn reactions and Ide tests		41
positive	6	
(9) CHEMICAL AND BIOCHEMICAL TESTS.		
<i>Blood—</i>		
Urea estimation... ..		60
Increased values	18	
Sugar estimation		8
Increased values	5	
Alcohol estimation		1
Cholesterol		1
<i>Serum and Plasma—</i>		
Calcium estimation		2
Protein	1	
Van den Berg reactions		13
Direct immediate positive	3	
Direct delayed positive	3	
Indirect positive	1	
Takata Ara tests		6
Positive	3	

SUMMARY OF THE WORK UNDERTAKEN AT THE PATHOLOGICAL
LABORATORY—*continued*

<i>Examinations</i>	<i>Positive Results</i>	<i>Total Examin- ations</i>
<i>Urines</i> —		
Chlorides		7
Urea clearance		4
<i>Glucose tolerance tests</i> —		
Diabetic curves	4	
<i>Fractional test meals</i>		27
Achlorhydria	9	
Hyperchlorhydria	1	

(10) HAEMATOLOGY.

Blood counts		1,868
Normocytic orthochromic anæmia		
Moderate	284	
Severe	142	
Normocytic, hypochromic anæmia		
Moderate	70	
Severe	31	
Microcytic, hypochromic anæmia—		
Moderate	30	
Severe	61	
Macrocytic, hyperchromic anæmia...—		
Moderate	15	
Severe	64	
Leucocytosis	125	
Leucopenia	14	
Eosinophilia	189	
Lymphocytosis	5	
Monocytosis	17	
Primitive red cells present	38	
Primitive white cells present	16	
Turk cells in films	7	
Abnormalities in red cells—		
Anisocytosis	141	
Poikilosocytosis	15	
Polychromasis	28	
Strippling	2	
Punctate basiphilia	1	
Sickling	155	
Blood sedimentation rates		279
Fragility of red cells		2
Platelet counts		1
Blood grouping <i>AB A B O</i>		70
European — 5 — 7		
Africans 1 15 15 21		
Syrians — 2 1 3		

SUMMARY OF THE WORK UNDERTAKEN AT THE PATHOLOGICAL LABORATORY—*continued*

						Positive Results	Total Examin- ations
<i>Examinations</i>							
(11) BACTERIOLOGY. Cultures—							
<i>Blood</i>							251
Bact. typhosum...						44	
Bact. coli ...						2	
Streptococci ...						3	
Staphylococcus aureus ...						2	
Pseudomonas pyocyanea ...						1	
Bact. lactis ærogenes ...						1	
<i>Fæces</i>							407
Bact. typhosum...						12	
Bact. flexneri unclassified						4	
" V ...						1	
" W ...						5	
" Z ...						12	
" 103 ...						2	
" Newcastle						2	
Bact. ambiguum ...						1	
Atypical dysentery ...						1	
Salmonella, unclassified ...						1	
Paracolon bacterium ...						1	
Bact. alkaligenes ...						14	
Strep. fæcalis ...						2	
<i>Urine—</i>							
Bact. Coli ...						15	
Proteus ...						1	
Bact. alkaligenes ...						2	
Staphylococcus aureus ...						4	
Strep. fæcalis ...						8	
<i>Throat swabs</i>							111
Streptococci. Hæmolytic ...						35	
Non-hæmolytic ...						60	
Unclassified ...						9	
Viridans ...						3	
Str. pneumoniae ...						3	
Corynebacterium diphtheriæ ...						7	
Staphylococcus aureus ...						17	
Hæmophilus influenzae ...						2	
Odium albicans ...						1	
<i>Fluids and pus, etc.</i>							53
Streptococci ...						7	
Str. pneumoniae ...						1	
Staphylococcus aureus ...						19	
Bact. coli ...						2	
<i>Cerebro-spinal fluids</i>							13
Str. pneumonia ...						1	
Neisseria meningitidis ...						1	
<i>Eye swabs</i>							5
Streptococci. Hæmolytic ...						1	
Koch weeks bacillus ...						2	

SUMMARY OF THE WORK UNDERTAKEN AT THE PATHOLOGICAL
LABORATORY—*continued*

<i>Examinations</i>					<i>Positive Results</i>	<i>Total Examin- ations</i>
<i>Miscellaneous...</i>						20
Streptococci					5	
Str. pneumoniae					2	
Staph. aureus					2	
Ducreys bacillus					1	
Proteus					1	
Pseudomonas pyocyanea					1	
C. diphtheriae					1	
<i>Water Supplies</i>						
Freetown supply						106
Organisms Coli type 1 and 2 and Irregular type 2					6	
Private well						1
Coli type 1					1	
George Brook						3
Coli type 1, Intermediate type 1 and aero- genes					3	
Fourah Bay College (Mount Aureol)						1
B. faecalis aerogenes					1	
Methodist Girls High School						1
Coli type 1 and Irregular					1	
Hill Station supply						13
Coli type 1, aerogenes type 2, Intermediate type 1 and B. cloacae					3	
Waterloo airfield						1
A.D.C.						1
Coli type 1 and Intermediate type 2					1	
Guma No. 2 River						8
Coli type 1, Irregular type 1 and 2, Inter- mediate types 1 and 2 and B aerogenes					8	
Grafton River						8
Coli type 1, Irregular Type 2 and aerogenes Type 1					8	
Congo River						7
Aerogenes types 1 and 2, Intermediate type 1 Irregular and B. cloacae					7	
<i>Soda water</i>						2
(12) MISCELLANEOUS FILMS, PUS. EXUDATES. Microscopic						
Pus and Fluids						21
Streptococci					1	
Staphylococci					1	
M. tuberculosis					2	
Moluscum bodies					1	
Tr. pertenuis					1	
<i>Eye smears</i>						11
N. gonorrhoea					2	
Kock-weeks bacillus					1	
<i>Throat swabs</i>						30
Vincent's organisms					5	
Oidium albicans					2	

SUMMARY OF THE WORK UNDERTAKEN AT THE PATHOLOGICAL LABORATORY—*continued*

<i>Examinations</i>				<i>Positive Results</i>	<i>Total Examin- ations</i>
<i>Leprosy</i>					
Skin snips and nasal smears	...	...			33
M. lepræ. Nasal smears	...	...		5	
Skin snips	...	...		4	
(13) HISTOLOGY.					
Tissues from biopsies	...	...	...		63
„ autopsies	...	...	...		63
Animal tissues (under veterinary)					
<i>Malignant tumours</i>					
Carcinoma. Appendix	...	...	...	1	
Ovary	...	...	...	1	
Liver Primary	...	...	...	1	
Sarcoma Bone	...	...	...	2	
Round celled	...	...	...	1	
Melanoma Skin	...	...	...	3	
Glioma Retina	...	...	...	1	
Epithelioma. Orbit	...	...	...	1	
Chorionic epithelioma	...	...	...	1	
Hodgkins lymphadenoma	...	...	...	2	
Mixed tumour. Salivary glands	...	...	...	1	
<i>Non-malignant tumours.</i>					
Adenoma. Thyroid, prostate, scalp, breast				5	
Papilloma. Skin	...	...	...	4	
Angioma	...	...	...	2	
Fibroma	...	...	...	2	
Fibromyoma	...	...	...	2	
Dermoid cyst. Neck	...	...	...	1	
Mucous polyp	...	...	...	1	
<i>Acute infections, Granulomas</i>					
Yaws. Skin	...	...	...	5	
Tuberculosis. Glands	...	...	...	3	
Lung	...	...	...	1	
Actinomycosis	...	...	...	1	
<i>Products of conception—</i>					
Abortions	...	...	...	3	
Hydatidiform mole	...	...	...	1	
Decidual casts	...	...	...	2	
<i>Degenerations, etc.—</i>					
Degenerations, liver	...	...	...	12	
Infarcts spleen	...	...	...	2	

SUMMARY OF THE WORK UNDERTAKEN AT THE PATHOLOGICAL LABORATORY—*continued*

<i>Examinations</i>	<i>Positive Results</i>	<i>Total Examin- ations</i>
(14) VETERINARY.		
Dog brains		23
Cat brains		1
Negri bodies present	11	
Guinea pig tissues		2
Cattle. Blood films		21
Rats. Wild. Examination for plague		4,540
Fleas. Rat, from live rats		1,253
Xenopsylla cheopis	448	
Xenopsylla braziliensis	805	
Snake. Identification		1
Causus rhombeatus	1	
Liver fluke		1
(15) MEDICO-LEGAL.		
Rape. Vaginal smears		14
N. gonorrhœa	3	
Urethral smears. Male		5
N. gonorrhœa	1	
Clothing, etc.		16
Human blood stains	3	
Seminal stain	1	
Goat. Vaginal smear		1
Human spermatozoa	1	
Weapons, etc.		8
Human blood	1	
Theft. Clothes for fuchsin stains		1
Blood on broken window, group		2
Grouping of suspects		2
Chemical examinations of various articles		14
Ethyl alcohol	1	
Methyl salicylate	1	
Acriflavin	1	
Ethylene glycol	1	
Oil of chenopodium	1	
Petrol	1	
Caterpillar hairs	1	
Stomach contents		5
Carbon tetrachloride	2	
Sasswood bark	3	
(16) VARIOUS.		
Urine for metals		2
Bacteriological test potency of penicillin		1
" sterilization of drums		1
Chemical examinations, water supplies		41
Total		33,672

EUROPEANS

No.	<i>Diseases</i>			<i>In-Patients</i>		<i>Deaths</i>		<i>Out-Patients</i>	
				<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>
1.	(a) Typhoid fever	...	...	1	—	—	—	—	—
	(b) Paratyphoid fever	...	...	—	—	—	—	—	—
2.	Typhus	...	...	—	—	—	—	—	—
3.	Relapsing fever	...	...	—	—	—	—	—	—
4.	Undulant fever	...	...	—	—	—	—	—	—
5.	Small Pox	...	...	—	—	—	—	—	—
6.	Measles	...	...	—	—	—	—	—	1
7.	Scarlet fever	...	...	—	—	—	—	—	—
8.	Whooping Cough	...	...	—	1	—	—	1	1
9.	Diphtheria	...	...	—	—	—	—	—	—
10.	Influenza :—								
	(a) With respiratory complications			—	—	—	—	—	—
	(b) Without respiratory complications	...	...	—	—	—	—	—	—
11.	Cholera	...	...	—	—	—	—	—	—
12.	Dysentery :—								
	(a) Amoebic	...	...	4	—	—	—	—	—
	(b) Bacillary	...	...	3	—	—	—	—	—
	(c) Unclassified	...	...	1	—	—	—	1	—
13.	Plague :—								
	(a) Bubonic	...	...	—	—	—	—	—	—
	(b) Pneumonic	...	...	—	—	—	—	—	—
	(c) Septicaemic	...	...	—	—	—	—	—	—
14.	Acute poliomyelitis	...	...	—	—	—	—	—	—
15.	Encephalitis lethargica	...	...	—	—	—	—	—	—
16.	Cerebro-spinal fever	...	...	—	—	—	—	—	—
17.	Rabies	...	...	—	—	—	—	—	—
18.	Tetanus	...	...	—	—	—	—	—	—
19.	Tuberculosis of the respiratory system			3	—	—	—	—	—
20.	Other tuberculous diseases		...	—	—	—	—	—	—
21.	Leprosy	...	...	—	—	—	—	—	—
22.	Venereal Diseases :—								
	(a) Syphilis	...	...	9	—	—	—	2	—
	(b) Gonorrhoea	...	...	12	—	—	—	5	—
	(c) Other venereal diseases		...	1	—	—	—	2	—
23.	Yellow fever	...	...	—	—	—	—	—	—
24.	Malaria :—								
	(a) Benign	...	...	1	—	—	—	—	—
	(b) Subtertian	...	...	38	3	—	—	8	2
	(c) Quartan	...	...	—	—	—	—	—	—
	(d) Unclassified	...	...	26	4	—	—	42	9
25.	Blackwater fever	...	...	—	—	—	—	—	—
26.	Kala-azar	...	...	—	—	—	—	—	—
27.	Trypanosomiasis	...	...	—	—	—	—	—	—
28.	Yaws	...	...	—	—	—	—	—	—
29.	Other protozoal diseases	...	...	—	—	—	—	—	—

EUROPEANS—*continued*

No.	<i>Diseases</i>			<i>In-Patients</i>		<i>Deaths</i>		<i>Out-Patients</i>	
				<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>
30.	Ankylostomiasis	...	...	2	—	—	—	—	—
31.	Schistosomiasis	...	...	—	—	—	—	—	—
32.	Other Helminthic diseases	...	...	3	1	—	—	2	—
33.	Other infectious or parasitic diseases	...	...	2	—	—	—	8	1
34.	Cancer and other tumours :—								
	(a) Malignant	...	...	—	—	—	—	—	—
	(b) Non-Malignant	...	...	4	—	—	—	1	—
	(c) Undetermined	...	...	—	—	—	—	—	—
35.	Rheumatic conditions	...	...	3	—	—	—	7	2
36.	Diabetes	...	...	1	—	—	—	—	—
37.	Scurvy	...	...	—	—	—	—	—	—
38.	Beriberi	...	...	—	—	—	—	—	—
39.	Pellagra	...	...	—	—	—	—	—	—
40.	Other diseases :—								
	(a) Nutritional	...	...	—	—	—	—	—	—
	(b) Endocrine glands and general	...	...	—	—	—	—	—	3
41.	Diseases of the blood and blood-forming organs			—	—	—	—	2	3
42.	Acute and chronic poisoning	...	...	1	1	—	—	2	—
43.	Cerebral haemorrhage	...	...	—	—	—	—	—	—
44.	Other diseases of the nervous system	...	...	3	5	—	—	9	5
45.	Trachoma	...	...	—	—	—	—	—	—
46.	Other diseases of the eye and annexa	...	...	5	—	—	—	19	4
47.	Diseases of the ear and mastoid sinus	...	...	7	1	—	—	43	9
48.	Diseases of the Circulatory system :—								
	(a) Heart	...	...	5	1	—	—	—	—
	(b) Other circulatory diseases	...	...	3	—	1	—	1	—
49.	Bronchitis	...	...	3	1	—	—	9	3
50.	Pneumonia :—								
	(a) Broncho-pneumonia	...	...	—	—	—	—	—	—
	(b) Lobar-pneumonia	...	...	—	—	—	—	1	—
	(c) Otherwise defined	...	...	—	—	—	—	—	—
51.	Other diseases of the respiratory system			9	4	—	—	26	12
52.	Diarrhoea and enteritis :—								
	(a) Under two years of age	...	...	—	—	—	—	—	—
	(b) Over two years of age	...	...	16	5	—	—	29	14
53.	Appendicitis	...	...	5	—	—	—	—	—
54.	Hernia, intestinal obstruction	...	...	—	—	—	—	1	—
55.	Cirrhosis of the liver	...	...	1	—	1	—	—	—
56.	Other diseases of the liver and biliary passages			10	2	1	—	2	—
57.	Other diseases of the digestive system			25	9	—	—	58	16
58.	Nephritis :—								
	(a) Acute	...	...	—	—	—	—	—	—
	(b) Chronic	...	...	—	—	—	—	—	—

EUROPEANS —continued

No.	Diseases	In-Patients		Deaths		Out-Patients	
		M.	F.	M.	F.	M.	F.
59.	Other non-venereal diseases of the genito-urinary system ...	9	15	—	—	7	9
60.	Diseases of pregnancy, childbirth, and the puerperal state :—						
	(a) Abortion ...	—	2	—	—	—	—
	(b) Ectopic gestation ...	—	—	—	—	—	—
	(c) Toxaemias of pregnancy ...	—	—	—	—	—	—
	(d) Other conditions of the puerperal state ...	—	—	—	—	—	—
61.	Diseases of the skin, cellular tissue, bones and organs of locomotion ...	104	15	2	—	222	65
62.	Congenital malformation and diseases of early infancy :—						
	(a) Congenital debility ...	—	—	—	—	—	—
	(b) Premature birth ...	—	—	—	—	—	—
	(c) Injury at birth ...	—	—	—	—	—	—
63.	Senility ...	—	—	—	—	—	—
64.	External causes :—						
	(a) Suicide ...	—	—	—	—	—	—
	(b) Other forms of violence ...	—	—	—	—	4	1
65.	Ill-defined ...	22	6	—	—	44	18
Total ...		342	76	5	—	558	178

AFRICANS

1.	(a) Typhoid fever ...	54	27	5	2	—	2
	(b) Paratyphoid fever ...	2	1	—	—	—	—
2.	Typhus ...	4	—	—	—	—	—
3.	Relapsing fever ...	—	—	—	—	—	—
4.	Undulant fever ...	—	—	—	—	—	—
5.	Small Pox ...	—	—	—	—	1	—
6.	Measles ...	6	6	—	—	19	16
7.	Scarlet fever ...	—	—	—	—	—	—
8.	Whooping Cough ...	12	6	1	2	72	81
9.	Diphtheria ...	1	2	—	—	—	—
10.	Influenza :—						
	(a) With respiratory complications	—	—	—	—	—	—
	(b) Without respiratory complications	—	—	—	—	—	—
11.	Cholera ...	—	—	—	—	—	—
12.	Dysentery :—						
	(a) Amoebic ...	64	47	7	3	90	49
	(b) Bacillary ...	28	10	2	2	14	6
	(c) Unclassified ...	30	9	9	—	251	207
13.	Plague :—						
	(a) Bubonic ...	—	—	—	—	—	—
	(b) Pneumonic ...	—	—	—	—	—	—
	(c) Septicaemic ...	—	—	—	—	—	—

AFRICANS—continued

No.	Diseases			In-Patients		Deaths		Out-Patients	
				M.	F.	M.	F.	M.	F.
14.	Acute poliomyelitis	...	...	1	—	—	—	—	—
15.	Encephalitis lethargica	...	...	—	—	—	—	—	—
16.	Cerebro-spinal fever	...	...	7	4	2	2	5	2
17.	Rabies	...	...	—	1	—	1	—	—
18.	Tetanus	...	...	30	17	19	14	10	2
19.	Tuberculosis of the respiratory system	...	...	92	33	33	11	88	28
20.	Other tuberculous diseases	...	...	12	16	3	1	18	4
21.	Leprosy	...	...	1	—	—	—	70	35
22.	Venereal diseases :—								
	(a) Syphilis	...	...	58	5	5	—	393	119
	(b) Gonorrhoea	...	...	173	22	3	1	3,217	404
	(c) Other venereal diseases	...	...	37	18	—	—	369	114
23.	Yellow fever	...	...	—	—	—	—	—	—
24.	Malaria :—								
	(a) Benign	...	...	9	3	—	—	—	—
	(b) Subtertian	...	...	78	163	4	4	1,636	308
	(c) Quartan	...	...	—	—	—	—	13	12
	(d) Unclassified	...	...	244	145	4	2	6,382	4,009
25.	Blackwater fever	...	...	1	2	—	1	1	2
26.	Kala-azar	...	...	—	—	—	—	—	—
28.	Trypanosomiasis	...	...	15	10	—	1	15	10
28.	Yaws	...	...	14	11	—	—	7,487	5,708
29.	Other protozoal diseases	...	...	—	—	—	—	6	4
30.	Ankylostomiasis	...	...	18	10	—	—	173	149
31.	Schistosomiasis	...	...	13	17	—	2	37	95
32.	Other Helminthic diseases	...	...	28	25	1	1	2,804	2,696
33.	Other infectious or parasitic diseases	...	...	21	8	—	—	142	71
34.	Cancer and other tumours :—								
	(a) Malignant	...	...	7	10	2	4	6	4
	(b) Non-Malignant	...	...	18	63	—	1	7	5
	(c) Undetermined	...	...	20	14	2	—	37	40
35.	Rheumatic conditions	...	...	90	38	—	2	4,840	2,632
36.	Diabetes	...	...	3	3	—	—	2	—
37.	Scurvy	...	...	—	—	—	—	—	—
38.	Beriberi	...	...	—	—	—	—	—	—
39.	Pellagra	...	...	—	—	—	—	—	—
40.	Other diseases :—								
	(a) Nutritional	...	...	54	62	10	7	1,362	626
	(b) Endocrine glands and general	...	...	3	2	—	—	38	13
41.	Diseases of the blood and blood-forming organs			57	96	15	10	409	697
42.	Acute and chronic poisoning	...	...	19	2	2	—	5	—
43.	Cerebral haemorrhage	...	...	41	9	23	5	5	—
44.	Other diseases of the nervous system	...	...	78	32	15	6	688	340
45.	Trachoma	...	...	3	—	—	—	12	20
46.	Other diseases of the eye and annexa	...	...	52	34	—	—	1,069	561
47.	Diseases of the ear and mastoid sinus			8	2	—	—	503	356

AFRICANS—continued

No.	Diseases	In-Patients		Deaths		Out-Patients	
		M.	F.	M.	F.	M.	F.
48.	Diseases of the Circulatory system :—						
	(a) Heart	77	26	29	11	157	79
	(b) Other circulatory diseases ...	38	21	8	4	226	83
49.	Bronchitis	53	36	3	—	2,779	1,637
50.	Pneumonia :—						
	(a) Broncho-pneumonia	68	71	13	13	23	33
	(b) Lobar-pneumonia	145	49	12	8	45	10
	(c) Otherwise defined	49	24	5	6	35	20
51.	Other diseases of the respiratory system	84	37	11	4	2,900	1,775
52.	Diarrhoea and enteritis :—						
	(a) Under two years of age ...	6	4	2	1	230	216
	(b) Over two years of age ...	52	34	7	3	1,143	549
53.	Appendicitis	9	1	1	—	1	—
54.	Hernia, intestinal obstruction ...	492	21	34	2	740	14
55.	Cirrhosis of the liver	3	5	—	5	9	4
56.	Other diseases of the liver and biliary passages	85	20	7	1	209	165
57.	Other diseases of the digestive system	118	62	13	3	4,130	2,977
58.	Nephritis :—						
	(a) Acute	4	4	1	2	16	6
	(b) Chronic	19	10	7	3	59	36
59.	Other non-venereal diseases of the genito urinary system	171	151	10	5	654	1,764
60.	Diseases of pregnancy, childbirth, and the puerperal state :—						
	(a) Abortion	—	163	—	2	—	204
	(b) Ectopic gestation	—	25	—	—	—	2
	(c) Toxaemias of pregnancy ...	—	335	—	10	—	3
	(d) Other condition of the puerperal state	—	828	—	15	—	457
61.	Diseases of the skin, cellular tissue, bones and organs of locomotion ...	667	303	13	6	10,747	5,164
62.	Congenital malformation and diseases of early infancy :—						
	(a) Congenital debility	2	1	—	—	2	—
	(b) Premature birth	—	11	—	—	—	1
	(c) Injury at birth	—	—	—	—	—	—
63.	Senility	2	1	2	—	3	7
64.	External causes :—						
	(a) Suicide	—	—	—	—	—	—
	(b) Other forms of violence ...	539	109	29	7	4,808	1,724
65.	Ill-defined	152	150	4	3	3,072	2,524
Total ...		4,341	3,487	378	199	64,284	38,881